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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,550	09/30/2003	Takashi Haruguchi	L8612.03102	6471
24257	7590	09/21/2006	EXAMINER	
STEVENS DAVIS MILLER & MOSHER, LLP			BEN, LOHA	
1615 L STREET, NW			ART UNIT	
SUITE 850			PAPER NUMBER	
WASHINGTON, DC 20036			2873	

DATE MAILED: 09/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/673,550

Applicant(s)

HARUGUCHI ET AL.

Examiner

Loha Ben

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 21 is/are pending in the application.
4a) Of the above claim(s) 15-20 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1,2,8,14 and 21 is/are rejected.
7) ☒ Claim(s) 3-7 and 9-13 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 0806.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Applicant's election with traverse of claims 1-14 and 21 in the reply filed on August 25, 2006 is acknowledged. The traversal is on the ground(s) that no unduly extensive or burdensome search would be required to examine the claims of various species in the same application. This is not found persuasive because the search necessary for claims 1-14 and 21 would be in (class/subclass) 359/811, 813,814,823 and 824; and in (class/subclass) 369/44.14-44.16. To include claims 15-20 in the examination, the search would have to extend beyond these areas. The extended areas are at least 369/44.22-44.24,44.32,44.41,112.23,53.19,53.28; and 720/683. This extension is due to the more detailed structures noted in claims 15-20 which would lead to a functional difference – vis-à-vis claims 1-14 and 21. Further, it should be appreciated that this is only the search factor – not the analysis factor of the claims yet. In light of this, the examiner finds that it is a heavy burden to also examine claims 15-20 along with the elected claims.

The requirement is still deemed proper and is therefore made FINAL.

Claims 15-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on August 25, 2006.

Specification

The disclosure is objected to because of the following informalities: Page 6, line 2 from the bottom, "22" should be – 21 --; page 7, line 1, "22" should be – 21 --; and page 10, line 9, "protrudes" should be – protrude --.

Appropriate correction is required.

Claims 4-7 and 9 are objected to because of the following informalities: In claims 4 and 5, line 2, after "coil"(both occurrences), -- portion – should be inserted; in claim 6, line 2, after "tracking", -- coil – should be inserted, and lines 3 and 4, after "coil", -- portion – should be inserted; in claim 7, line 2, after "tracking", -- coil – should be inserted; and in claim 9, lines 3 and 6, after "tracking", "coils" should be replaced with – coil portions --, otherwise "the tracking coils" recited has no antecedent basis.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 14 and 21 are rejected under 35 U.S.C. 102(a) as being anticipated by Kawano.

As now presented, claims 1, 2 and 21 read on Figs. 9 and 15 and the accompanying texts. Every thing claimed in claims 1, 2 and 21 can be found in these Figs. Especially noted, **the four tracking coils 33t of Fig. 15 are combined with each other**. This characteristic appears to be the critical limitation of the invention.

With regard to claim 14, the limitation claimed therein can also be viewed from these Figs. where a portion of the tracking coil and a portion of the focusing coil are arranged between the magnets 5.

Claims 1, 2 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by either Yamamoto et al, or Song (art cited by Applicants).

As is understood, with every corresponding limitation considered, claims 1, 2 and 21 read on Fig. 4 and the accompanying text of Yamamoto et al. With respect to the four tracking coils 17 of Yamamoto et al, they are seen as being **combined with each other** through the focusing coil 16, **as broadly interpreted**. Similarly, this interpretation is also applied to Song where the four tracking coils 56-59 are combined with each other via the focusing coil 64.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawano.

The difference between claim 8 and Fig. 16 of Kawano is that the device of claim 8 has three tracking coils connected in series, whereas that of Kawano has four tracking coils connected in series. To this end, it is seen only the number of tracking coils is different, but not the connection. Therefore, the connection in series in this matter is old. Thus, it would have been obvious to one skilled in the art at the time of invention to

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connect as many tracking coils in series as needed in order to carry the current from one tracking coil to another so long as it creates no disturbing (or unintended) field in the tracking direction.

Allowable Subject Matter

Claims 3-7 and 9-13 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Loha Ben whose telephone number is (571) 272-2323. The examiner can normally be reached on M-SAT, generally between 12:00 noon to 8:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack, can be reached on M-F, at (571) 272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

September 17, 2006

A handwritten signature in black ink, appearing to read 'Loha Ben', with a long horizontal stroke extending to the right.

Loha Ben
Primary Examiner